



## SEQUENCE LISTING

&lt;110&gt; Bell, Leonard

&lt;120&gt; METHOD OF PROPHYLAXIS AGAINST LARGE MYOCARDIAL INFARCTIONS

&lt;130&gt; 59

&lt;140&gt; 10/047,608

&lt;141&gt; 2002-01-14

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&lt;160&gt; 18

&lt;170&gt; PatentIn version 3.2

&lt;210&gt; 1

&lt;211&gt; 747

&lt;212&gt; DNA

&lt;213&gt; Artificial

&lt;220&gt;

&lt;223&gt; Humanized antibody

&lt;220&gt;

&lt;221&gt; CDS

&lt;222&gt; (1)..(744)

&lt;400&gt; 1

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Val Gly Asp Arg Val Thr Ile Thr Cys Gly Ala Ser Glu Asn Ile Tyr	
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ggc gcg ctg aac tgg tat caa cgt aaa cct ggg aaa gct ccg aag ctt	144
Gly Ala Leu Asn Trp Tyr Gln Arg Lys Pro Gly Lys Ala Pro Lys Leu	
35 40 45	

ctg att tac ggt gcg acg aac ctg gca gat gga gtc cct tct cgc ttc	192
Leu Ile Tyr Gly Ala Thr Asn Leu Ala Asp Gly Val Pro Ser Arg Phe	
50 55 60	

tct gga tcc ggc tcc gga acg gat ttc act ctg acc atc agc agt ctg	240
Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu	
65 70 75 80	

cag cct gaa gac ttc gct acg tat tac tgt cag aac gtt tta aat act	288
Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Asn Val Leu Asn Thr	
85 90 95	

ccg ttg act ttc gga cag ggt acc aag gtg gaa ata aaa cgt act ggc	336
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Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gln	Val		
		115					120					125					
caa	ctg	gtg	caa	tcc	ggc	gcc	gag	gtc	aag	aag	cca	ggg	gcc	tca	gtc		432
Gln	Leu	Val	Gln	Ser	Gly	Ala	Glu	Val	Lys	Lys	Pro	Gly	Ala	Ser	Val		
	130					135					140						
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Lys	Val	Ser	Cys	Lys	Ala	Ser	Gly	Tyr	Ile	Phe	Ser	Asn	Tyr	Trp	Ile		
145					150					155					160		
caa	tgg	gtg	cgt	cag	gcc	ccc	ggg	cag	ggc	ctg	gaa	tgg	atg	ggg	gag		528
Gln	Trp	Val	Arg	Gln	Ala	Pro	Gly	Gln	Gly	Leu	Glu	Trp	Met	Gly	Glu		
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atc	tta	cgc	ggc	tct	ggg	agc	acc	gaa	tat	acc	gaa	aat	ttt	aaa	gac		576
Ile	Leu	Pro	Gly	Ser	Gly	Ser	Thr	Glu	Tyr	Thr	Glu	Asn	Phe	Lys	Asp		
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cgt	gtt	act	atg	acg	cgt	gac	act	tcg	act	agt	aca	gta	tac	atg	gag		624
Arg	Val	Thr	Met	Thr	Arg	Asp	Thr	Ser	Thr	Ser	Thr	Val	Tyr	Met	Glu		
		195					200					205					
ctc	tcc	agc	ctg	cga	tcg	gag	gac	acg	gcc	gtc	tat	tat	tgc	gcg	cgt		672
Leu	Ser	Ser	Leu	Arg	Ser	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys	Ala	Arg		
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Gly	Thr	Leu	Val	Thr	Val	Ser	Ser										
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Gly Ala Leu Asn Trp Tyr Gln Arg Lys Pro Gly Lys Ala Pro Lys Leu  
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Leu Ile Tyr Gly Ala Thr Asn Leu Ala Asp Gly Val Pro Ser Arg Phe  
 50 55 60

Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu  
 65 70 75 80

Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Asn Val Leu Asn Thr  
 85 90 95

Pro Leu Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Gly  
 100 105 110

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Val  
 115 120 125

Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala Ser Val  
 130 135 140

Lys Val Ser Cys Lys Ala Ser Gly Tyr Ile Phe Ser Asn Tyr Trp Ile  
 145 150 155 160

Gln Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met Gly Glu  
 165 170 175

Ile Leu Pro Gly Ser Gly Ser Thr Glu Tyr Thr Glu Asn Phe Lys Asp  
 180 185 190

Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val Tyr Met Glu  
 195 200 205

Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg  
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Tyr Phe Phe Gly Ser Ser Pro Asn Trp Tyr Phe Asp Val Trp Gly Gln  
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Gly Thr Leu Val Thr Val Ser Ser  
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 gtg ggc gat agg gtc acc atc acc tgc ggc gcc agc gaa aac atc tat 96  
 Val Gly Asp Arg Val Thr Ile Thr Cys Gly Ala Ser Glu Asn Ile Tyr  
 20 25 30  
 ggc gcg ctg aac tgg tat caa cag aaa cct ggg aaa gct ccg aag ctt 144  
 Gly Ala Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu  
 35 40 45  
 ctg att tac ggt gcg acg aac ctg gca gat gga gtc cct tct cgc ttc 192  
 Leu Ile Tyr Gly Ala Thr Asn Leu Ala Asp Gly Val Pro Ser Arg Phe  
 50 55 60  
 tct gga tcc ggc tcc gga acg gat ttc act ctg acc atc agc agt ctg 240  
 Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu  
 65 70 75 80  
 cag cct gaa gac ttc gct acg tat tac tgt cag aac gtt tta aat act 288  
 Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Asn Val Leu Asn Thr  
 85 90 95  
 ccg ttg act ttc gga cag ggt acc aag gtg gaa ata aaa cgt act ggc 336  
 Pro Leu Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Gly  
 100 105 110  
 ggt ggt ggt tct ggt ggc ggt gga tct ggt ggt ggc ggt tct caa gtc 384  
 Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Val  
 115 120 125  
 caa ctg gtg caa tcc ggc gcc gag gtc aag aag cca ggg gcc tca gtc 432  
 Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala Ser Val  
 130 135 140  
 aaa gtg tcc tgt aaa gct agc ggc tat att ttt tct aat tat tgg att 480  
 Lys Val Ser Cys Lys Ala Ser Gly Tyr Ile Phe Ser Asn Tyr Trp Ile  
 145 150 155 160  
 caa tgg gtg cgt cag gcc ccc ggg cag ggc ctg gaa tgg atg ggt gag 528  
 Gln Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met Gly Glu  
 165 170 175

atc tta ccg ggc tct ggt agc acc gaa tat gcc caa aaa ttc cag ggc 576  
 Ile Leu Pro Gly Ser Gly Ser Thr Glu Tyr Ala Gln Lys Phe Gln Gly  
 180 185 190

cgt gtt act atg acg cgt gac act tcg act agt aca gta tac atg gag 624  
 Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val Tyr Met Glu  
 195 200 205

ctc tcc agc ctg cga tcg gag gac acg gcc gtc tat tat tgc gcg cgt 672  
 Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg  
 210 215 220

tat ttt ttt ggt tct agc ccg aat tgg tat ttt gat gtt tgg ggt caa 720  
 Tyr Phe Phe Gly Ser Ser Pro Asn Trp Tyr Phe Asp Val Trp Gly Gln  
 225 230 235 240

gga acc ctg gtc act gtc tcg agc tga 747  
 Gly Thr Leu Val Thr Val Ser Ser  
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<220>  
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Val Gly Asp Arg Val Thr Ile Thr Cys Gly Ala Ser Glu Asn Ile Tyr  
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Gly Ala Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu  
 35 40 45

Leu Ile Tyr Gly Ala Thr Asn Leu Ala Asp Gly Val Pro Ser Arg Phe  
 50 55 60

Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu  
 65 70 75 80

Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Asn Val Leu Asn Thr  
 85 90 95

Pro Leu Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Gly

100					105					110						
Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gln	Val
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130					135					140						
Lys	Val	Ser	Cys	Lys	Ala	Ser	Gly	Tyr	Ile	Phe	Ser	Asn	Tyr	Trp	Ile	
145					150					155					160	
Gln	Trp	Val	Arg	Gln	Ala	Pro	Gly	Gln	Gly	Leu	Glu	Trp	Met	Gly	Glu	
165					170					175						
Ile	Leu	Pro	Gly	Ser	Gly	Ser	Thr	Glu	Tyr	Ala	Gln	Lys	Phe	Gln	Gly	
180					185					190						
Arg	Val	Thr	Met	Thr	Arg	Asp	Thr	Ser	Thr	Ser	Thr	Val	Tyr	Met	Glu	
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Leu	Ser	Ser	Leu	Arg	Ser	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys	Ala	Arg	
210					215					220						
Tyr	Phe	Phe	Gly	Ser	Ser	Pro	Asn	Trp	Tyr	Phe	Asp	Val	Trp	Gly	Gln	
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Gly	Thr	Leu	Val	Thr	Val	Ser	Ser									
245																

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gtg ggc gat agg gtc acc atc acc tgc ggc gcc agc gaa aac atc tat	96
Val Gly Asp Arg Val Thr Ile Thr Cys Gly Ala Ser Glu Asn Ile Tyr	
20 25 30	
ggc gcg ctg aac tgg tat caa cag aaa ccc ggg aaa gct ccg aag ctt	144
Gly Ala Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu	
35 40 45	
ctg att tac ggt gcg acg aac ctg gca gat gga gtc cct tct cgc ttc	192
Leu Ile Tyr Gly Ala Thr Asn Leu Ala Asp Gly Val Pro Ser Arg Phe	
50 55 60	
tct gga tcc ggc tcc gga acg gat ttc act ctg acc atc agc agt ctg	240
Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu	
65 70 75 80	
cag cct gaa gac ttc gct acg tat tac tgt cag aac gtt tta aat act	288
Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Asn Val Leu Asn Thr	
85 90 95	
ccg ttg act ttc gga cag ggt acc aag gtg gaa ata aaa cgt act ggc	336
Pro Leu Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Gly	
100 105 110	
ggg ggt ggt tct ggt ggc ggt gga tct ggt ggt ggc ggt tct caa gtc	384
Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Val	
115 120 125	
caa ctg gtg caa tcc ggc gcc gag gtc aag aag cca ggg gcc tca gtc	432
Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala Ser Val	
130 135 140	
aaa gtg tcc tgt aaa gct agc ggc tat att ttt tct aat tat tgg att	480
Lys Val Ser Cys Lys Ala Ser Gly Tyr Ile Phe Ser Asn Tyr Trp Ile	
145 150 155 160	
caa tgg gtg cgt cag gcc ccc ggg cag ggc ctg gaa tgg atg ggt gag	528
Gln Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met Gly Glu	
165 170 175	
atc tta ccg ggc tct ggt agc acc gaa tat acc gaa aat ttt aaa gac	576
Ile Leu Pro Gly Ser Gly Ser Thr Glu Tyr Thr Glu Asn Phe Lys Asp	
180 185 190	
cgt gtt act atg acg cgt gac act tcg act agt aca gta tac atg gag	624
Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val Tyr Met Glu	
195 200 205	
ctc tcc agc ctg cga tcg gag gac acg gcc gtc tat tat tgc gcg cgt	672
Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg	
210 215 220	
tat ttt ttt ggt tct agc ccg aat tgg tat ttt gat gtt tgg ggt caa	720
Tyr Phe Phe Gly Ser Ser Pro Asn Trp Tyr Phe Asp Val Trp Gly Gln	
225 230 235 240	
gga acc ctg gtc act gtc tcg agc tga	747

Gly Thr Leu Val Thr Val Ser Ser  
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Val Gly Asp Arg Val Thr Ile Thr Cys Gly Ala Ser Glu Asn Ile Tyr  
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Gly Ala Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu  
35 40 45

Leu Ile Tyr Gly Ala Thr Asn Leu Ala Asp Gly Val Pro Ser Arg Phe  
50 55 60

Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu  
65 70 75 80

Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Asn Val Leu Asn Thr  
85 90 95

Pro Leu Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Gly  
100 105 110

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Val  
115 120 125

Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala Ser Val  
130 135 140

Lys Val Ser Cys Lys Ala Ser Gly Tyr Ile Phe Ser Asn Tyr Trp Ile  
145 150 155 160

Gln Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met Gly Glu  
165 170 175



Ile Leu Pro Gly Ser Gly Ser Thr Glu Tyr Thr Glu Asn Phe Lys Asp  
180 185 190

Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val Tyr Met Glu  
195 200 205

Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg  
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Tyr Phe Phe Gly Ser Ser Pro Asn Trp Tyr Phe Asp Val Trp Gly Gln  
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Gly Thr Leu Val Thr Val Ser Ser  
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Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Glu Asn Ile Tyr  
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ggc gcg ctg aac tgg tat caa cag aaa cct ggg aaa gct ccg aag ctt 144  
Gly Ala Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu  
35 40 45  
ctg att tac ggt gcg acg aac ctg gca gat gga gtc cct tct cgc ttc 192  
Leu Ile Tyr Gly Ala Thr Asn Leu Ala Asp Gly Val Pro Ser Arg Phe  
50 55 60  
tct gga tcc ggc tcc gga acg gat ttc act ctg acc atc agc agt ctg 240  
Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu  
65 70 75 80  
cag oct gaa gac ttc gct acg tat tac tgt cag aac gtt tta aat act 288  
Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Asn Val Leu Asn Thr

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Pro	Leu	Thr	Phe	Gly	Gln	Gly	Thr	Lys	Val	Glu	Ile	Lys	Arg	Thr	Gly	
			100					105					110			
ggg	ggg	ggg	tct	ggg	ggc	ggg	gga	tct	ggg	ggg	ggc	ggg	tct	caa	gtc	384
Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gln	Val	
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caa	ctg	gtg	caa	tcc	ggc	gcc	gag	gtc	aag	aag	cca	ggg	gcc	tca	gtc	432
Gln	Leu	Val	Gln	Ser	Gly	Ala	Glu	Val	Lys	Lys	Pro	Gly	Ala	Ser	Val	
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Lys	Val	Ser	Cys	Lys	Ala	Ser	Gly	Tyr	Ile	Phe	Ser	Asn	Tyr	Trp	Ile	
145					150					155					160	
caa	tgg	gtg	cgt	cag	gcc	ccc	ggg	cag	ggc	ctg	gaa	tgg	atg	ggg	gag	528
Gln	Trp	Val	Arg	Gln	Ala	Pro	Gly	Gln	Gly	Leu	Glu	Trp	Met	Gly	Glu	
				165				170						175		
atc	tta	cgc	ggc	tct	ggg	agc	acc	gaa	tat	gcc	caa	aaa	ttc	cag	ggc	576
Ile	Leu	Pro	Gly	Ser	Gly	Ser	Thr	Glu	Tyr	Ala	Gln	Lys	Phe	Gln	Gly	
			180					185					190			
cgt	gtt	act	atg	acg	cgt	gac	act	tcg	act	agt	aca	gta	tac	atg	gag	624
Arg	Val	Thr	Met	Thr	Arg	Asp	Thr	Ser	Thr	Ser	Thr	Val	Tyr	Met	Glu	
			195				200					205				
ctc	tcc	agc	ctg	cga	tcg	gag	gac	acg	gcc	gtc	tat	tat	tgc	gcg	cgt	672
Leu	Ser	Ser	Leu	Arg	Ser	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys	Ala	Arg	
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Tyr	Phe	Phe	Gly	Ser	Ser	Pro	Asn	Trp	Tyr	Phe	Asp	Val	Trp	Gly	Gln	
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Gly	Thr	Leu	Val	Thr	Val	Ser	Ser									
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Gly Ala Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu  
35 40 45

Leu Ile Tyr Gly Ala Thr Asn Leu Ala Asp Gly Val Pro Ser Arg Phe  
50 55 60

Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu  
65 70 75 80

Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Asn Val Leu Asn Thr  
85 90 95

Pro Leu Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Gly  
100 105 110

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Val  
115 120 125

Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala Ser Val  
130 135 140

Lys Val Ser Cys Lys Ala Ser Gly Tyr Ile Phe Ser Asn Tyr Trp Ile  
145 150 155 160

Gln Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met Gly Glu  
165 170 175

Ile Leu Pro Gly Ser Gly Ser Thr Glu Tyr Ala Gln Lys Phe Gln Gly  
180 185 190

Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val Tyr Met Glu  
195 200 205

Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg  
210 215 220

Tyr Phe Phe Gly Ser Ser Pro Asn Trp Tyr Phe Asp Val Trp Gly Gln  
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Gly Thr Leu Val Thr Val Ser Ser

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 <222> (1)..(744)

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gtg ggc gat agg gtc acc atc acc tgc ggc gcc agc gaa aac atc tat 96  
 Val Gly Asp Arg Val Thr Ile Thr Cys Gly Ala Ser Glu Asn Ile Tyr  
 20 25 30

ggc gcg ctg aac tgg tat caa cag aaa cct ggg aaa gct ccg aag ctt 144  
 Gly Ala Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu  
 35 40 45

ctg att tac ggt gcg acg agc ctg cag tct gga gtc cct tct cgc ttc 192  
 Leu Ile Tyr Gly Ala Thr Ser Leu Gln Ser Gly Val Pro Ser Arg Phe  
 50 55 60

tct gga tcc ggc tcc gga acg gat ttc act ctg acc atc agc agt ctg 240  
 Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu  
 65 70 75 80

cag cct gaa gac ttc gct acg tat tac tgt cag aac gtt tta aat act 288  
 Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Asn Val Leu Asn Thr  
 85 90 95

ccg ttg act ttc gga cag ggt acc aag gtg gaa ata aaa cgt act ggc 336  
 Pro Leu Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Gly  
 100 105 110

ggt ggt ggt tct ggt ggc ggt gga tct ggt ggt ggc ggt tct caa gtc 384  
 Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Gln Val  
 115 120 125

caa ctg gtg caa tcc ggc gcc gag gtc aag aag cca ggg gcc tca gtc 432  
 Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala Ser Val  
 130 135 140

aaa gtg tcc tgt aaa gct agc ggc tat att ttt tct aat tat tgg att 480  
 Lys Val Ser Cys Lys Ala Ser Gly Tyr Ile Phe Ser Asn Tyr Trp Ile  
 145 150 155 160

caa tgg gtg cgt cag gcc ccc ggg cag ggc ctg gaa tgg atg ggt gag	528
Gln Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met Gly Glu	
165 170 175	

atc tta ccg ggc tct ggt agc acc gaa tat gcc caa aaa ttc cag ggc	576
Ile Leu Pro Gly Ser Gly Ser Thr Glu Tyr Ala Gln Lys Phe Gln Gly	
180 185 190	

cgt gtt act atg acg cgt gac act tcg act agt aca gta tac atg gag	624
Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val Tyr Met Glu	
195 200 205	

ctc tcc agc ctg cga tcg gag gac acg gcc gtc tat tat tgc gcg cgt	672
Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg	
210 215 220	

tat ttt ttt ggt tct agc ccg aat tgg tat ttt gat gtt tgg ggt caa	720
Tyr Phe Phe Gly Ser Ser Pro Asn Trp Tyr Phe Asp Val Trp Gly Gln	
225 230 235 240	

gga acc ctg gtc act gtc tcg agc tga	747
Gly Thr Leu Val Thr Val Ser Ser	
245	

<210> 10  
 <211> 248  
 <212> PRT  
 <213> Artificial

<220>  
 <223> Synthetic Construct

<400> 10

Met Ala Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser
1 5 10 15

Val Gly Asp Arg Val Thr Ile Thr Cys Gly Ala Ser Glu Asn Ile Tyr
20 25 30

Gly Ala Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu
35 40 45

Leu Ile Tyr Gly Ala Thr Ser Leu Gln Ser Gly Val Pro Ser Arg Phe
50 55 60

Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu
65 70 75 80

Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Asn Val Leu Asn Thr
85 90 95

Pro Leu Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Gly  
100 105 110

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Val  
115 120 125

Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala Ser Val  
130 135 140

Lys Val Ser Cys Lys Ala Ser Gly Tyr Ile Phe Ser Asn Tyr Trp Ile  
145 150 155 160

Gln Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met Gly Glu  
165 170 175

Ile Leu Pro Gly Ser Gly Ser Thr Glu Tyr Ala Gln Lys Phe Gln Gly  
180 185 190

Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val Tyr Met Glu  
195 200 205

Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg  
210 215 220

Tyr Phe Phe Gly Ser Ser Pro Asn Trp Tyr Phe Asp Val Trp Gly Gln  
225 230 235 240

Gly Thr Leu Val Thr Val Ser Ser  
245

<210> 11  
<211> 747  
<212> DNA  
<213> Artificial

<220>  
<223> Humanized antibody

<220>  
<221> CDS  
<222> (1)..(744)

<400> 11  
atg gcc gat atc cag atg acc cag tcc ccg tcc tcc ctg tcc gcc tct

48

Met	Ala	Asp	Ile	Gln	Met	Thr	Gln	Ser	Pro	Ser	Ser	Leu	Ser	Ala	Ser		
1				5					10					15			
gtg	ggc	gat	agg	gtc	acc	atc	acc	tgc	cgt	gct	agc	gaa	aac	atc	tat		96
Val	Gly	Asp	Arg	Val	Thr	Ile	Thr	Cys	Arg	Ala	Ser	Glu	Asn	Ile	Tyr		
			20					25					30				
ggc	gcg	ctg	aac	tgg	tat	caa	cag	aaa	cct	ggg	aaa	gct	ccg	aag	ctt		144
Gly	Ala	Leu	Asn	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Lys	Ala	Pro	Lys	Leu		
			35					40					45				
ctg	att	tac	ggt	gcg	acg	agc	ctg	cag	tct	gga	gtc	cct	tct	cgc	ttc		192
Leu	Ile	Tyr	Gly	Ala	Thr	Ser	Leu	Gln	Ser	Gly	Val	Pro	Ser	Arg	Phe		
			50				55				60						
tct	gga	tcc	ggc	tcc	gga	acg	gat	ttc	act	ctg	acc	atc	agc	agt	ctg		240
Ser	Gly	Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr	Leu	Thr	Ile	Ser	Ser	Leu		
					70					75					80		
65																	
cag	cct	gaa	gac	ttc	gct	acg	tat	tac	tgt	cag	aac	gtt	tta	aat	act		288
Gln	Pro	Glu	Asp	Phe	Ala	Thr	Tyr	Tyr	Cys	Gln	Asn	Val	Leu	Asn	Thr		
				85					90					95			
ccg	ttg	act	ttc	gga	cag	ggt	acc	aag	gtg	gaa	ata	aaa	cgt	act	ggc		336
Pro	Leu	Thr	Phe	Gly	Gln	Gly	Thr	Lys	Val	Glu	Ile	Lys	Arg	Thr	Gly		
			100					105					110				
ggg	ggg	ggg	tct	ggg	ggc	ggg	gga	tct	ggg	ggg	ggc	ggg	tct	caa	gtc		384
Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gln	Val		
			115				120					125					
caa	ctg	gtg	caa	tcc	ggc	gcc	gag	gtc	aag	aag	cca	ggg	gcc	tca	gtc		432
Gln	Leu	Val	Gln	Ser	Gly	Ala	Glu	Val	Lys	Lys	Pro	Gly	Ala	Ser	Val		
			130			135					140						
aaa	gtg	tcc	tgt	aaa	gct	agc	ggc	tat	att	ttt	tct	aat	tat	tgg	att		480
Lys	Val	Ser	Cys	Lys	Ala	Ser	Gly	Tyr	Ile	Phe	Ser	Asn	Tyr	Trp	Ile		
					150					155					160		
145																	
caa	tgg	gtg	cgt	cag	gcc	ccc	ggg	cag	ggc	ctg	gaa	tgg	atg	ggg	gag		528
Gln	Trp	Val	Arg	Gln	Ala	Pro	Gly	Gln	Gly	Leu	Glu	Trp	Met	Gly	Glu		
				165				170						175			
atc	tta	ccg	ggc	tct	ggg	agc	acc	gaa	tat	gcc	caa	aaa	ttc	cag	ggc		576
Ile	Leu	Pro	Gly	Ser	Gly	Ser	Thr	Glu	Tyr	Ala	Gln	Lys	Phe	Gln	Gly		
			180					185					190				
cgt	gtt	act	atg	acg	cgt	gac	act	tgc	act	agt	aca	gta	tac	atg	gag		624
Arg	Val	Thr	Met	Thr	Arg	Asp	Thr	Ser	Thr	Ser	Thr	Val	Tyr	Met	Glu		
			195				200					205					
ctc	tcc	agc	ctg	cga	tgc	gag	gac	acg	gcc	gtc	tat	tat	tgc	gcg	cgt		672
Leu	Ser	Ser	Leu	Arg	Ser	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys	Ala	Arg		
			210			215					220						
tat	ttt	ttt	ggg	tct	agc	ccg	aat	tgg	tat	ttt	gat	gtt	tgg	ggg	caa		720
Tyr	Phe	Phe	Gly	Ser	Ser	Pro	Asn	Trp	Tyr	Phe	Asp	Val	Trp	Gly	Gln		





Gln Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met Gly Glu  
165 170 175

Ile Leu Pro Gly Ser Gly Ser Thr Glu Tyr Ala Gln Lys Phe Gln Gly  
180 185 190

Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val Tyr Met Glu  
195 200 205

Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg  
210 215 220

Tyr Phe Phe Gly Ser Ser Pro Asn Trp Tyr Phe Asp Val Trp Gly Gln  
225 230 235 240

Gly Thr Leu Val Thr Val Ser Ser  
245

<210> 13  
<211> 747  
<212> DNA  
<213> Artificial

<220>  
<223> Humanized antibody

<220>  
<221> CDS  
<222> (1)..(744)

<400> 13  
atg gcc gat atc cag atg acc cag tcc ccg tcc tcc ctg tcc gcc tct 48  
Met Ala Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser  
1 5 10 15  
gtg ggc gat agg gtc acc atc acc tgc cgt gct agc gaa aac atc tat 96  
Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Glu Asn Ile Tyr  
20 25 30  
ggc gcg ctg aac tgg tat caa cag aaa ccc ggg aaa gct ccg aag ctt 144  
Gly Ala Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu  
35 40 45  
ctg att tac ggt gcg acg aac ctg gca gat gga gtc cct tct cgc ttc 192  
Leu Ile Tyr Gly Ala Thr Asn Leu Ala Asp Gly Val Pro Ser Arg Phe  
50 55 60  
tct gga tcc ggc tcc gga acg gat ttc act ctg acc atc agc agt ctg 240  
Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu  
65 70 75 80

cag cct gaa gac ttc gct acg tat tac tgt cag aac gtt tta aat act	288
Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Asn Val Leu Asn Thr	
85 90 95	
ccg ttg act ttc gga cag ggt acc aag gtg gaa ata aaa cgt act ggc	336
Pro Leu Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Gly	
100 105 110	
ggg ggt ggt tct ggt ggc ggt gga tct ggt ggt ggc ggt tct caa gtc	384
Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Val	
115 120 125	
caa ctg gtg caa tcc ggc gcc gag gtc aag aag cca ggg gcc tca gtc	432
Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala Ser Val	
130 135 140	
aaa gtg tcc tgt aaa gct agc ggc tat att ttt tct aat tat tgg att	480
Lys Val Ser Cys Lys Ala Ser Gly Tyr Ile Phe Ser Asn Tyr Trp Ile	
145 150 155 160	
caa tgg gtg cgt cag gcc ccc ggg cag ggc ctg gaa tgg atg ggt gag	528
Gln Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met Gly Glu	
165 170 175	
atc tta ccg ggc tct ggt agc acc gaa tat acc gaa aat ttt aaa gac	576
Ile Leu Pro Gly Ser Gly Ser Thr Glu Tyr Thr Glu Asn Phe Lys Asp	
180 185 190	
cgt gtt act atg acg cgt gac act tcg act agt aca gta tac atg gag	624
Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val Tyr Met Glu	
195 200 205	
ctc tcc agc ctg cga tcg gag gac acg gcc gtc tat tat tgc gcg cgt	672
Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg	
210 215 220	
tat ttt ttt ggt tct agc ccg aat tgg tat ttt gat gtt tgg ggt caa	720
Tyr Phe Phe Gly Ser Ser Pro Asn Trp Tyr Phe Asp Val Trp Gly Gln	
225 230 235 240	
gga acc ctg gtc act gtc tcg agc tga	747
Gly Thr Leu Val Thr Val Ser Ser	
245	

<210> 14  
 <211> 248  
 <212> PRT  
 <213> Artificial

<220>  
 <223> Synthetic Construct

<400> 14

Met Ala Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser

1	5	10	15																
Val	Gly	Asp	Arg	Val	Thr	Ile	Thr	Cys	Arg	Ala	Ser	Glu	Asn	Ile	Tyr				
		20						25					30						
Gly	Ala	Leu	Asn	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Lys	Ala	Pro	Lys	Leu				
		35					40					45							
Leu	Ile	Tyr	Gly	Ala	Thr	Asn	Leu	Ala	Asp	Gly	Val	Pro	Ser	Arg	Phe				
	50					55					60								
Ser	Gly	Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr	Leu	Thr	Ile	Ser	Ser	Leu				
65					70					75					80				
Gln	Pro	Glu	Asp	Phe	Ala	Thr	Tyr	Tyr	Cys	Gln	Asn	Val	Leu	Asn	Thr				
			85						90					95					
Pro	Leu	Thr	Phe	Gly	Gln	Gly	Thr	Lys	Val	Glu	Ile	Lys	Arg	Thr	Gly				
			100					105					110						
Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gln	Val				
		115					120					125							
Gln	Leu	Val	Gln	Ser	Gly	Ala	Glu	Val	Lys	Lys	Pro	Gly	Ala	Ser	Val				
	130					135					140								
Lys	Val	Ser	Cys	Lys	Ala	Ser	Gly	Tyr	Ile	Phe	Ser	Asn	Tyr	Trp	Ile				
145					150					155					160				
Gln	Trp	Val	Arg	Gln	Ala	Pro	Gly	Gln	Gly	Leu	Glu	Trp	Met	Gly	Glu				
				165					170					175					
Ile	Leu	Pro	Gly	Ser	Gly	Ser	Thr	Glu	Tyr	Thr	Glu	Asn	Phe	Lys	Asp				
			180					185					190						
Arg	Val	Thr	Met	Thr	Arg	Asp	Thr	Ser	Thr	Ser	Thr	Val	Tyr	Met	Glu				
		195					200					205							
Leu	Ser	Ser	Leu	Arg	Ser	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys	Ala	Arg				
	210					215					220								
Tyr	Phe	Phe	Gly	Ser	Ser	Pro	Asn	Trp	Tyr	Phe	Asp	Val	Trp	Gly	Gln				
225					230					235					240				

Gly Thr Leu Val Thr Val Ser Ser  
245

<210> 15  
<211> 747  
<212> DNA  
<213> Artificial

<220>  
<223> Humanized antibody

<220>  
<221> CDS  
<222> (1)..(744)

<400> 15  
atg gcc gat atc cag atg acc cag tcc ccg tcc tcc ctg tcc gcc tct 48  
Met Ala Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser  
1 5 10 15

gtg ggc gat agg gtc acc atc acc tgc ggc gcc agc gaa aac atc tat 96  
Val Gly Asp Arg Val Thr Ile Thr Cys Gly Ala Ser Glu Asn Ile Tyr  
20 25 30

ggc gcg ctg aac tgg tat caa cag aaa ccc ggg aaa gct ccg aag ctt 144  
Gly Ala Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu  
35 40 45

ctg att tac ggt gcg acg agc ctg cag tct gga gtc cct tct cgc ttc 192  
Leu Ile Tyr Gly Ala Thr Ser Leu Gln Ser Gly Val Pro Ser Arg Phe  
50 55 60

tct gga tcc ggc tcc gga acg gat ttc act ctg acc atc agc agt ctg 240  
Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu  
65 70 75 80

cag cct gaa gac ttc gct acg tat tac tgt cag aac gtt tta aat act 288  
Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Asn Val Leu Asn Thr  
85 90 95

ccg ttg act ttc gga cag ggt acc aag gtg gaa ata aaa cgt act ggc 336  
Pro Leu Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Gly  
100 105 110

ggt ggt ggt tct ggt ggc ggt gga tct ggt ggt ggc ggt tct caa gtc 384  
Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Val  
115 120 125

caa ctg gtg caa tcc ggc gcc gag gtc aag aag cca ggg gcc tca gtc 432  
Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala Ser Val  
130 135 140

aaa gtg tcc tgt aaa gct agc ggc tat att ttt tct aat tat tgg att 480

[illegible]

Met	Ala	Asp	Ile	Gln	Met	Thr	Gln	Ser	Pro	Ser	Ser	Leu	Ser	Ala	Ser
1			5					10						15	
Val	Gly	Asp	Arg	Val	Thr	Ile	Thr	Cys	Gly	Ala	Ser	Glu	Asn	Ile	Tyr
			20					25					30		
Gly	Ala	Leu	Asn	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Lys	Ala	Pro	Lys	Leu
		35					40					45			
Leu	Ile	Tyr	Gly	Ala	Thr	Ser	Leu	Gln	Ser	Gly	Val	Pro	Ser	Arg	Phe
	50					55					60				
Ser	Gly	Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr	Leu	Thr	Ile	Ser	Ser	Leu
65					70					75					80

Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Asn Val Leu Asn Thr  
85 90 95

Pro Leu Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Gly  
100 105 110

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Val  
115 120 125

Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala Ser Val  
130 135 140

Lys Val Ser Cys Lys Ala Ser Gly Tyr Ile Phe Ser Asn Tyr Trp Ile  
145 150 155 160

Gln Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met Gly Glu  
165 170 175

Ile Leu Pro Gly Ser Gly Ser Thr Glu Tyr Thr Glu Asn Phe Lys Asp  
180 185 190

Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val Tyr Met Glu  
195 200 205

Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg  
210 215 220

Tyr Phe Phe Gly Ser Ser Pro Asn Trp Tyr Phe Asp Val Trp Gly Gln  
225 230 235 240

Gly Thr Leu Val Thr Val Ser Ser  
245

<210> 17  
<211> 747  
<212> DNA  
<213> Artificial

<220>  
<223> Humanized antibody

<220>  
<221> CDS  
<222> (1)..(744)

<400> 17

atg gcc gat atc cag atg acc cag tcc ccg tcc tcc ctg tcc gcc tct	48
Met Ala Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser	
1 5 10 15	
gtg ggc gat agg gtc acc atc acc tgc cgt gct agc gaa aac atc tat	96
Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Glu Asn Ile Tyr	
20 25 30	
ggc gcg ctg aac tgg tat caa cag aaa ccc ggg aaa gct ccg aag ctt	144
Gly Ala Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu	
35 40 45	
ctg att tac ggt gcg acg agc ctg cag tct gga gtc cct tct cgc ttc	192
Leu Ile Tyr Gly Ala Thr Ser Leu Gln Ser Gly Val Pro Ser Arg Phe	
50 55 60	
tct gga tcc ggc tcc gga acg gat ttc act ctg acc atc agc agt ctg	240
Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu	
65 70 75 80	
cag cct gaa gac ttc gct acg tat tac tgt cag aac gtt tta aat act	288
Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Asn Val Leu Asn Thr	
85 90 95	
ccg ttg act ttc gga cag ggt acc aag gtg gaa ata aaa cgt act ggc	336
Pro Leu Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Gly	
100 105 110	
ggt ggt ggt tct ggt ggc ggt gga tct ggt ggt ggc ggt tct caa gtc	384
Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser Gln Val	
115 120 125	
caa ctg gtg caa tcc ggc gcc gag gtc aag aag cca ggg gcc tca gtc	432
Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala Ser Val	
130 135 140	
aaa gtg tcc tgt aaa gct agc ggc tat att ttt tct aat tat tgg att	480
Lys Val Ser Cys Lys Ala Ser Gly Tyr Ile Phe Ser Asn Tyr Trp Ile	
145 150 155 160	
caa tgg gtg cgt cag gcc ccc ggg cag ggc ctg gaa tgg atg ggt gag	528
Gln Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met Gly Glu	
165 170 175	
atc tta ccg ggc tct ggt agc acc gaa tat acc gaa aat ttt aaa gac	576
Ile Leu Pro Gly Ser Gly Ser Thr Glu Tyr Thr Glu Asn Phe Lys Asp	
180 185 190	
cgt gtt act atg acg cgt gac act tcg act agt aca gta tac atg gag	624
Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val Tyr Met Glu	
195 200 205	
ctc tcc agc ctg cga tcg gag gac acg gcc gtc tat tat tgc gcg cgt	672
Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg	
210 215 220	

tat ttt ttt ggt tct agc ccg aat tgg tat ttt gat gtt tgg ggt caa	720
Tyr Phe Phe Gly Ser Ser Pro Asn Trp Tyr Phe Asp Val Trp Gly Gln	
225 230 235 240	

gga acc ctg gtc act gtc tcg agc tga	747
Gly Thr Leu Val Thr Val Ser Ser	
245	

<210> 18  
 <211> 248  
 <212> PRT  
 <213> Artificial

<220>  
 <223> Synthetic Construct

<400> 18

Met Ala Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser
1 5 10 15

Val Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Glu Asn Ile Tyr
20 25 30

Gly Ala Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu
35 40 45

Leu Ile Tyr Gly Ala Thr Ser Leu Gln Ser Gly Val Pro Ser Arg Phe
50 55 60

Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu
65 70 75 80

Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Asn Val Leu Asn Thr
85 90 95

Pro Leu Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Gly
100 105 110

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gln Val
115 120 125

Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala Ser Val
130 135 140

Lys Val Ser Cys Lys Ala Ser Gly Tyr Ile Phe Ser Asn Tyr Trp Ile



145		150		155		160
Gln Trp Val Arg	Gln Ala Pro Gly Gln Gly Leu Glu Trp Met Gly Glu					
	165		170		175	
Ile Leu Pro Gly Ser Gly Ser Thr Glu Tyr Thr Glu Asn Phe Lys Asp						
	180		185		190	
Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser Thr Val Tyr Met Glu						
	195		200		205	
Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg						
	210		215		220	
Tyr Phe Phe Gly Ser Ser Pro Asn Trp Tyr Phe Asp Val Trp Gly Gln						
	225		230		235	240
Gly Thr Leu Val Thr Val Ser Ser						
	245					